

Appendix

Team Measurement Tools

Adapted with permission from Valentine et al., *Measuring Teamwork in Health Care Settings: A Review of Survey Instruments* (in press).

Team Effectiveness Surveys <i>(teamwork one of several dimensions measured)</i>				
Survey Name	Psychometric Validity*	Related to Outcomes‡	Team Behaviors Measured	Team Emergent States Measured§
Work Group Effectiveness (Campion 1993)	No	Yes	Workload sharing Communication	Social support Potency
Crossfunctional Cooperation (Pinto 1993)	No	No	Cooperation	none
Group Effectiveness/Interdisciplinary Collaboration (Vinokur-Kaplan 1995/Armer 1978)	No	Yes	Effort Use of expertise Strategy	none
Team Process Domain (Denison 1996)	No	No	Workload sharing Use of expertise Strategy	Norms Teamwork Values
Psychological Safety & Team Learning (Edmondson 1999)	Yes	Yes	Team learning behaviors	Psychological safety Team efficacy
Team Effectiveness Audit Tool (Bateman 2002)	Yes	No	Use of resources	Team synergy
Team Process (Doolen 2003)	No	No	Information sharing Team processes	none
Team Diagnostic Survey (Wageman 2005)	No	Yes	Effort Use of expertise Strategy Social interactions	none
Team Survey (Senior 2007)	No	No	Task interactions	Social support
Teamwork Surveys for Bounded Teams <i>(groups of people who work together routinely)</i>				
Survey Name	Psychometric Validity*	Related to Outcomes‡	Team Behaviors Measured	Team Emergent States Measured§
Team Process Scale (Brannick 1993)	No	No	Communication Coordination Collaboration	Group cohesion

Team Member Exchange Quality Scale (Seers 1995)	No	No	Communication Coordination Workload sharing	Understanding roles
Collaboration Scale (Kahn 1997)	No	No	General teamwork quality Communication	Shared objectives
Team Climate Inventory (Anderson 1998)	Yes	Yes	Communication Coordination Collaboration Use of all members' expertise Share workload Shared decision making	Respect Group cohesion Social support Psychological safety Shared objectives
Team Process Quality (Hauptman 1999)	No	No	Communication Coordination Collaboration Use of all members' expertise	none
Team Survey (Millward 2001)	Yes	No	Communication Coordination Use of all members' expertise Share workload	Respect Understanding roles Shared objectives
Team Effectiveness (Pearce 2002)	Yes	No	General teamwork quality Communication	none
Team Functioning (Strasser 2002)	No	No	Communication Collaboration Use of all members' expertise Active conflict management	Respect Psychological safety Understanding roles Shared objectives
Cross-Functional Team Processes (Alexander 2005)	Yes	Yes	Communication Shared decision making	Respect Social support Psychological safety
Teamwork Quality Survey (Hoegl 2001)	Yes	Yes	Communication Coordination Collaboration Use of all members' expertise Share workload Shared decision making Active conflict management Effort	Respect Group cohesion Social support
Teamwork Scale (Friesen 2008)	No	No	none	Respect Group cohesion Social support

Team Organization (La Duckers 2008)	No	No	Communication Coordination	none
Teamwork Surveys for Unbounded Teams <i>(groups of people who work in shifting/changing configurations)</i>				
Survey Name	Psychometric Validity*	Related to Outcomes‡	Team Behaviors Measured	Team Emergent States Measured§
ICU Nurse Physician Collaboration (Shortell 1991)	Yes	Yes	Communication Coordination Use of all participants' expertise Shared decision making Active conflict management Effort	Respect
Collaboration & Satisfaction about Care Decisions (Baggs 1994)	No	Yes	Communication Coordination Collaboration Use of all participants' expertise Shared decision making	none
Professional Working Relationships (Adams 1995)	No	No	General teamwork quality Communication Coordination Collaboration Use of all participants' expertise Share workload Shared decision making Active conflict management Effort	Respect Social support Understanding roles
Relational Coordination (Gittell 2002)	No	Yes	Communication Use of all participants' expertise Active conflict management	Respect Shared objectives
Hospital Survey on Patient Safety (AHRQ 2004)	Yes	Yes	Communication Coordination Collaboration	Respect Psychological safety Social support

Perceptions about Interdisciplinary Collaboration (Copnell 2004)	No	No	Communication Coordination Collaboration Use of all participants' expertise Shared decision making	none
Teamwork Scale (Hutchinson 2006)	No	No	General teamwork quality Communication	none
Safety Attitudes Questionnaire (Sexton 2006)	No	Yes	Communication Coordination Collaboration Use of all participants' expertise Active conflict management	Respect Psychological safety Social support
Leiden Operating Theater & Intensive Care Safety (LOTICS) (Van Beuzekom 2007)	No	No	General teamwork quality	Understanding roles
Collaboration Scale (Masse 2008)	No	No	Communication Use of all participants' expertise Active conflict management	Respect Psychological safety
Nurse Physician Collaboration (Ushiro 2009)	No	No	Communication Coordination Collaboration Use of all participants' expertise Share workload Active conflict management Effort	Respect Social support Understanding roles Shared objectives
Nursing Teamwork Survey (Kalisch 2010)	No	Yes	Communication Coordination Collaboration Use of all participants' expertise Share workload Active conflict management Effort	Respect Social support Understanding roles Shared objectives

*Surveys determined to display psychometric validity if they met reasonable standards in four domains: internal consistency/reliability, interrater agreement and reliability, discriminant validity, and content/external validity.

‡Outcomes defined as clinical measures, nonclinical process measures, or both.

§Emergent states are defined as “affective, cognitive and motivation states that emerge during the course of [teamwork].”